[0018] In some embodiments, a compound is described comprising Formula (II):

In certain embodiments, L is -(alkylene-O)_n-alkylene-. In specific embodiments, each alkylene is — $\mathrm{CH_2CH_2}$ —, n is equal to 3, and $\mathrm{R_7}$ is methyl. In other embodiments, L is -alkylene-. In specific embodiments, each alkylene is — $\mathrm{CH_2CH_2}$ — and $\mathrm{R_7}$ is methyl or hydrogen. In certain embodiments, L is -(alkylene-O)_n-alkylene-C(O)—. In certain specific embodiments, each alkylene is — $\mathrm{CH_2CH_2}$, n is equal to 4, and $\mathrm{R_7}$ is methyl. In further or alternative embodiments, L is -(alkylene-O)_n—($\mathrm{CH_2}$)_n—NHC(O)—($\mathrm{CH_2}$)_n—C(Me)_2-S—S—($\mathrm{CH_2}$)_n—NHC(O)-(alkylene-O-)_n-alkylene-. In specific embodiments, each alkylene is — $\mathrm{CH_2CH_2}$ —, n is equal to 1, n' is equal to 2, n" is equal to 1, n is equal to 2, n" is equal to 1, n is equal to 4, and $\mathrm{R_7}$ is methyl.

[0019] In some embodiments, Y is azide. In other embodiments, Y is cyclooctyne. In specific embodiments, the cyclooctyne has a structure of:

[0020] each R₁₉ is independently selected from the group consisting of C₁-C₆ alkyl, C₁-C₆ alkoxy, ester, ether, thioether, aminoalkyl, halogen, alkyl ester, aryl ester, amide, aryl amide, alkyl halide, alkyl amine, alkyl sulfonic acid, alkyl nitro, thioester, sulfonyl ester, halosulfonyl, nitrile, alkyl nitrile, and nitro; and

[0021] q is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or 11. [0022] Some embodiments of the present invention describe a compound, or salt thereof, comprising Formula (III), (IV), (V) or (VI):